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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/594,082	06/15/2000	Hiroshi Shimada	193220US2S	8576

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EXAMINER

LE, KIMLIEN T

ART UNIT	PAPER NUMBER
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2653

DATE MAILED: 06/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/594,082

Applicant(s)

SHIMADA, HIROSHI

Examiner

Kimlien T Le

Art Unit

2653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 19, 22 and 23 is/are rejected.
- 7) ☒ Claim(s) 2-18, 20 and 21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 June 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date Z.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed on March 11, 2004 have been fully considered but they are not deemed to be persuasive.

Applicant asserts on page 16:

"As clear from the above-noted descriptions in the present specification, and in comparison with the teachings in Takamine, the "track center" noted in Takamine resides within a target track, i.e., is a center of each actual track, whereas the center point of the track shape of the present claims does not reside within any target track, but instead is a point generally at a center of a disk."

The Examiner maintains that Miura et al. shows a position deviation between a center point of the track shape of the disk and the rotation center point of the disk (Fig. 4A; See also column 1; lines 45-50)

### **Objections**

2. Claims 22-23 are objected to because of the following informalities: In claim 22, line 15, --correction--should be added before "control", and in claim 22, line 16, --tracking--should be added before "control". Appropriate correction is required.

### ***Drawings***

Figures 2-3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Objection to Title***

Art Unit: 2653

3. The title of the invention should be replaced by "OPTICAL DISK APPARATUS CAPABLE OF CORRECTING TRACKING ERROR". A new title is required that is clearly indicative of the invention to which the claims are directed.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 22-23 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In the specification, "a tracking correction circuit configured to generate a control signal supplied to the tracking moving section based on an addition output which is obtained by adding the control signal and the eccentricity signal (See claim 22)" is not mentioned and therefore is considered new matter.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 2653

Claims 1, 19 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Miura et al. (U.S. Patent 4,775, 966).

Regarding claims 1 and 19, Miura et al. shows an optical disk reproducing apparatus comprising: a signal extracting section (Fig. 2, elements 27, 21 and 16; See also column 4, lines 40-65) configured to emit light on to a track of a disk having a track shape of concentric tracks or a spiral track on which information has been recorded during rotation of the disk, to extract the information by receiving the light which is reflected from the track or is passed through the track, to convert the information to an electric signal, and to output the electric signal; an information signal generating circuit (Fig. 1, element 1; See also column 5, lines 55-68) configured to generate a signal including the information which is recorded on the disk and a tracking error signal which shows a deviation of a relative position in the radial direction of the disk between the light which the signal extracting section emits and the track from the signal extracting section; a tracking moving section (Fig. 2, element 20; See also column 4, lines 40-65) configured to move the position of the light emitted from the signal extracting section in the radial direction of the disk; a tracking control circuit (Fig. 1, element 2; See also column 4, lines 40-65) configured to generate a tracking control signal in response to the tracking error signal such that the position of the emitted light from the signal extracting section is maintained on the track; an eccentricity signal generating circuit (Fig. 1, element 14; See also column 5, lines 55-68) configured to generate an eccentricity showing a position deviation between a center point of the track shape of the disk and the rotation center point of the disk on the basis of the output of the information signal generating circuit; and a tracking correcting circuit (Fig. 1, element 4; See also column 5, lines 55-68) configured to substantially add the output of the eccentricity signal

Art Unit: 2653

generating circuit to the output of the tracking control circuit to drive and control the tracking moving section on the basis of the added output.

Regarding claim 22, Miura et al. shows an integrated circuit device for use in an optical disk reproducing apparatus in which a light is emitted from a pickup to a target position of a track on a disk having a track shape of concentric tracks or a spiral track on which information has been recorded, wherein the target position of the track is moved in a radial direction on the disk by a tracking moving section during rotation of the disk, and a received light signal is obtained based on the light reflected from the track or passed through the track to read out an information signal from the received light signal, the device comprising: a tracking control circuit (Fig. 1, element 2; See also column 5, lines 55-68) configured to generate a tracking control signal in response to a tracking error signal obtained based on the received light signal and denoting a relative deviation between a position of an emitted light and the track in the radial direction of the disk such that the position of the emitted light is maintained on the track; an eccentricity signal generating circuit (Fig. 1, element 14; See also column 5, lines 55-68) configured to generate an eccentricity signal denoting a deviation between a center point of the track shape on the disk and a rotation center point of the disk based on the information signal; and a tracking correction circuit (Fig. 1, element 4; See also column 5, lines 55-68) configured to generate a control signal supplied to the tracking moving section based on an addition output which is obtained by adding the tracking control signal and the eccentricity signal.

Art Unit: 2653

*Allowable Subject Matter*

6. Claim 2-18, 20-21 and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance:

In claim 2, the limitation of the optical disk reproducing apparatus according to claim 1, wherein the eccentricity signal generating circuit comprises: a reading-out speed detecting circuit configured to detect the reading-out speed of the information from the output of the information signal generating circuit, and a band-pass filter configured to extract the component which is near the rotation frequency of the disk within the range of the change in the reading-out speed of the information from the output of the reading-out speed detecting circuit to output the eccentricity signal, taken in conjunction with the limitations of claim 1, is not anticipated, nor made obvious over the prior art of record .

In claim 20, the limitation of the optical disk reproducing method, wherein the eccentricity signal generating step comprises: detecting the reading-out speed of the information from the information signal, and extracting the frequency component which is near the rotation frequency of the disk within the range of the change in the reading-out speed of the information from the detected reading-out speed to output the eccentricity signal, taken in conjunction with the limitations of claim 19, is not anticipated, nor made obvious over the prior art of record .

In claim 23, the limitation of an integrated circuit device according to claim 22, wherein the eccentricity signal generating circuit comprises: a read-out speed detecting circuit configured to detect a read-out speed of the information signal; and a band-pass filter configured to extract a

Art Unit: 2653

component which is near a rotation frequency of disk from read-out speed variation components contained in an output of the read-out speed detecting circuit, taken in conjunction with the limitations of claim 23, is not anticipated, nor made obvious over the prior art of record .

***Points of Contact***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimlien T Le whose telephone number is 703 305 3498. The examiner can normally be reached on M-F 8a.m-5p.m

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on 703- 305- 6137. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kimlien Le

  
**TAN DINH**  
**PRIMARY EXAMINER**